

FIG. 1

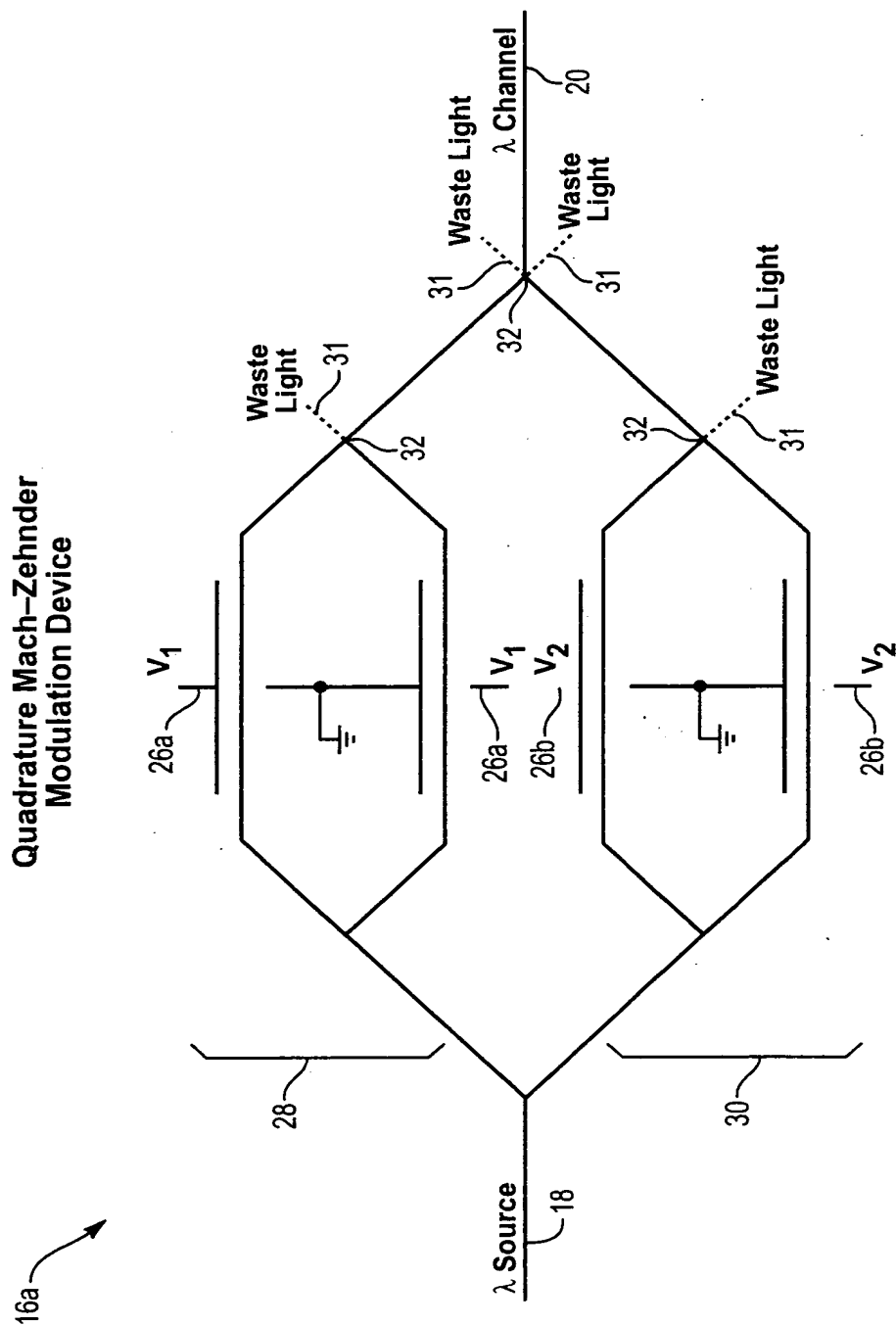


FIG. 2

Mach-Zehnder Device Transfer Function

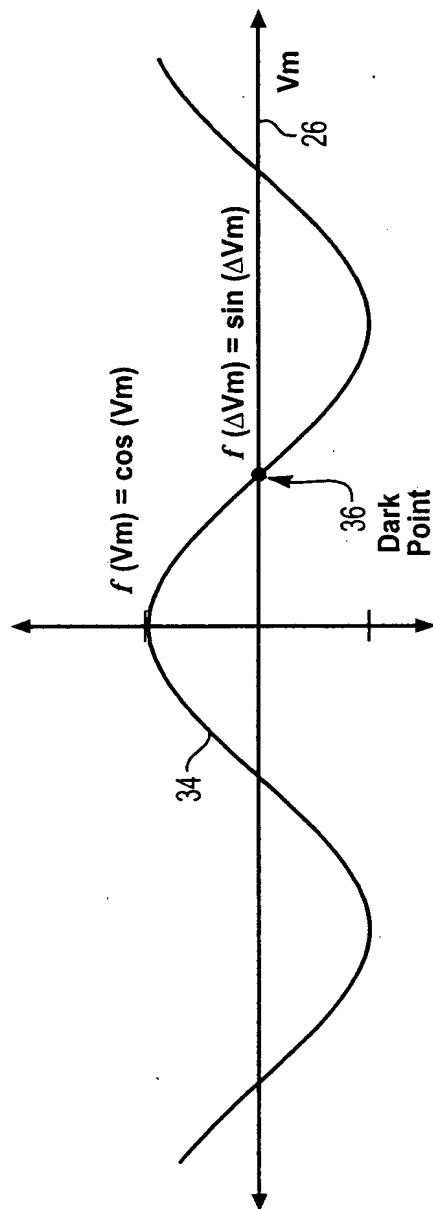


FIG. 3

12 →

Modulation Synthesizer

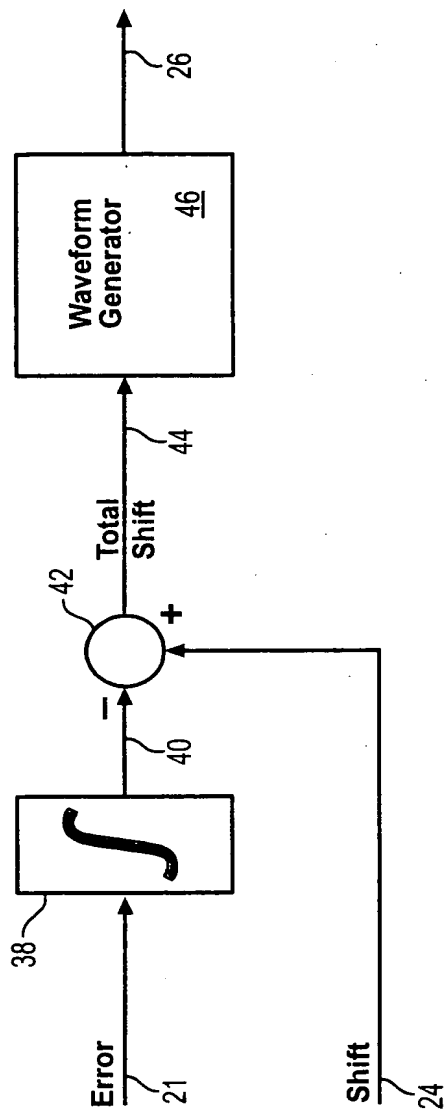


FIG. 4

12b

Quadrature Modulation Synthesizer (With On/Off Data Keying)

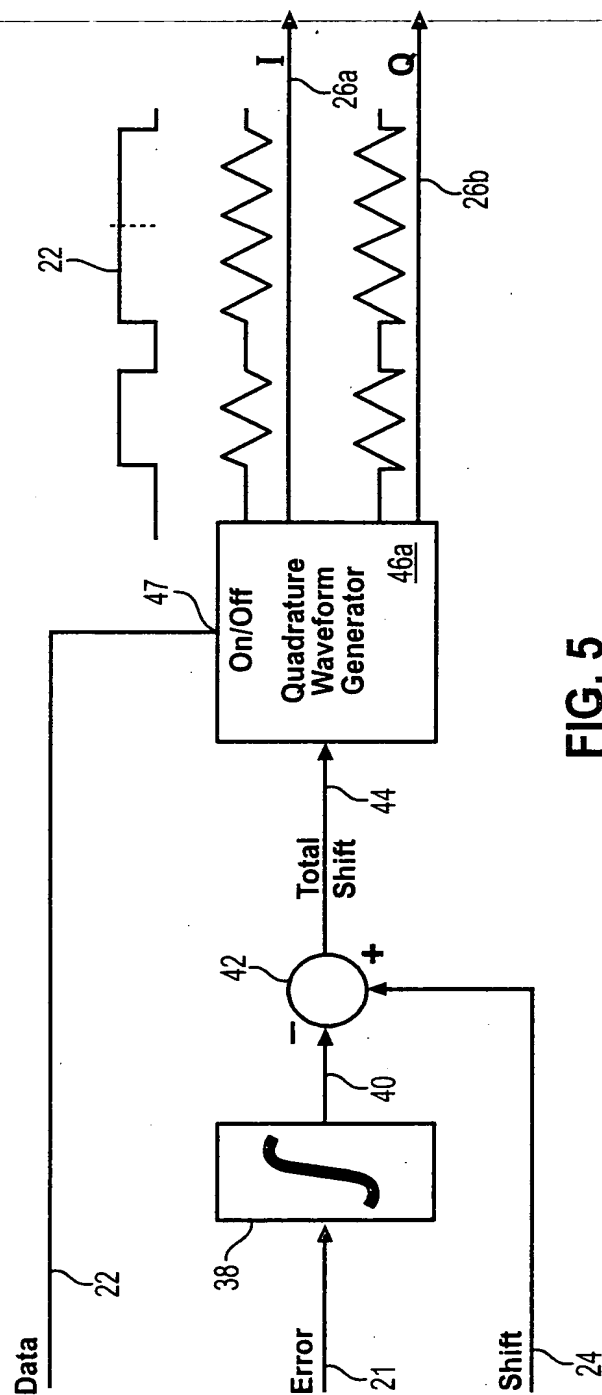


FIG. 5

Phase Modulation Device

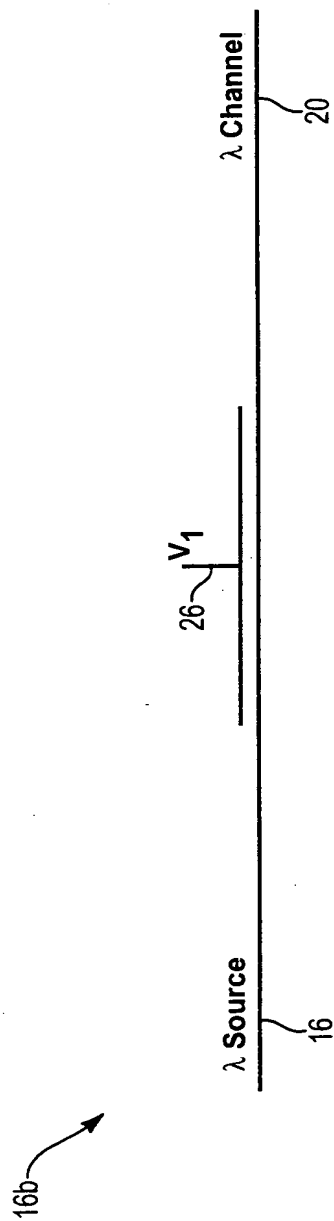


FIG. 6

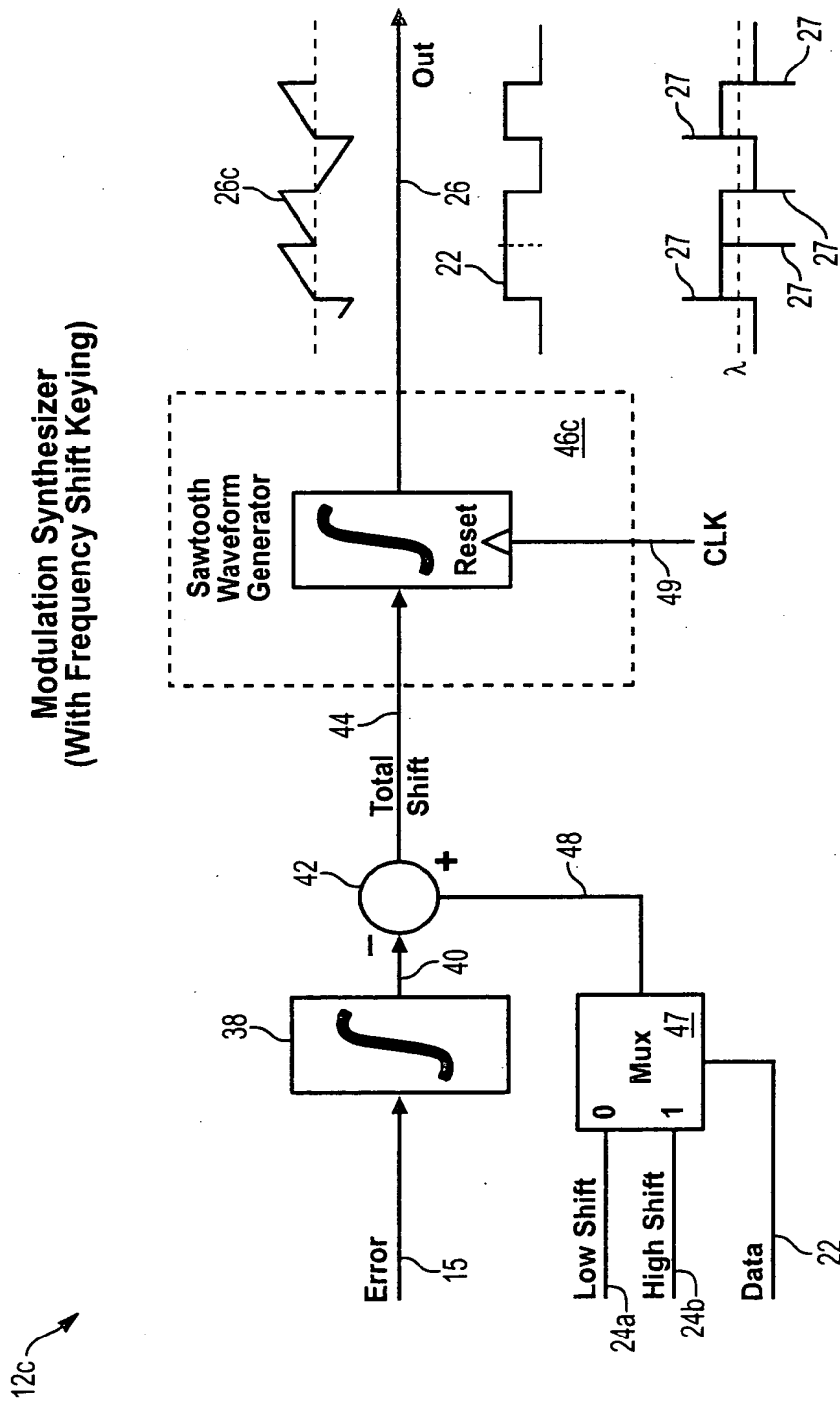


FIG. 7

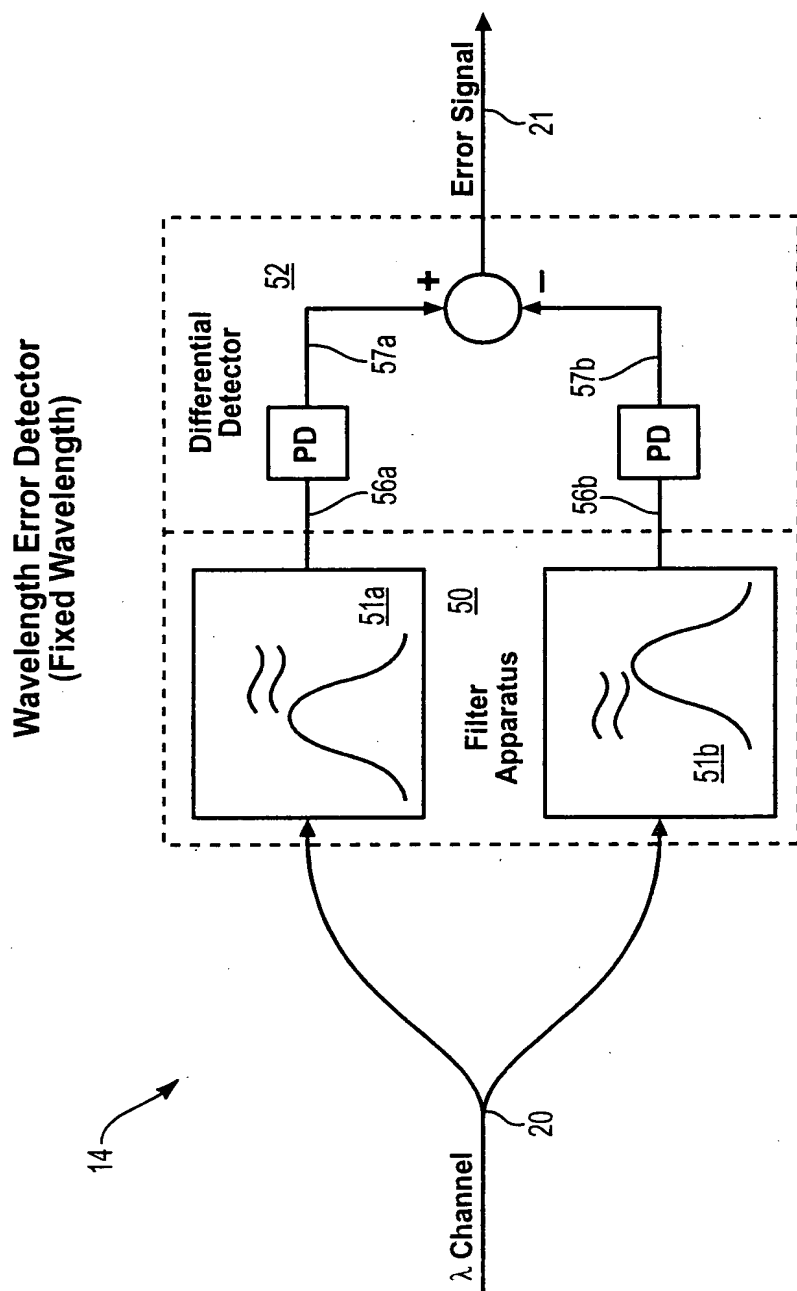


FIG. 8

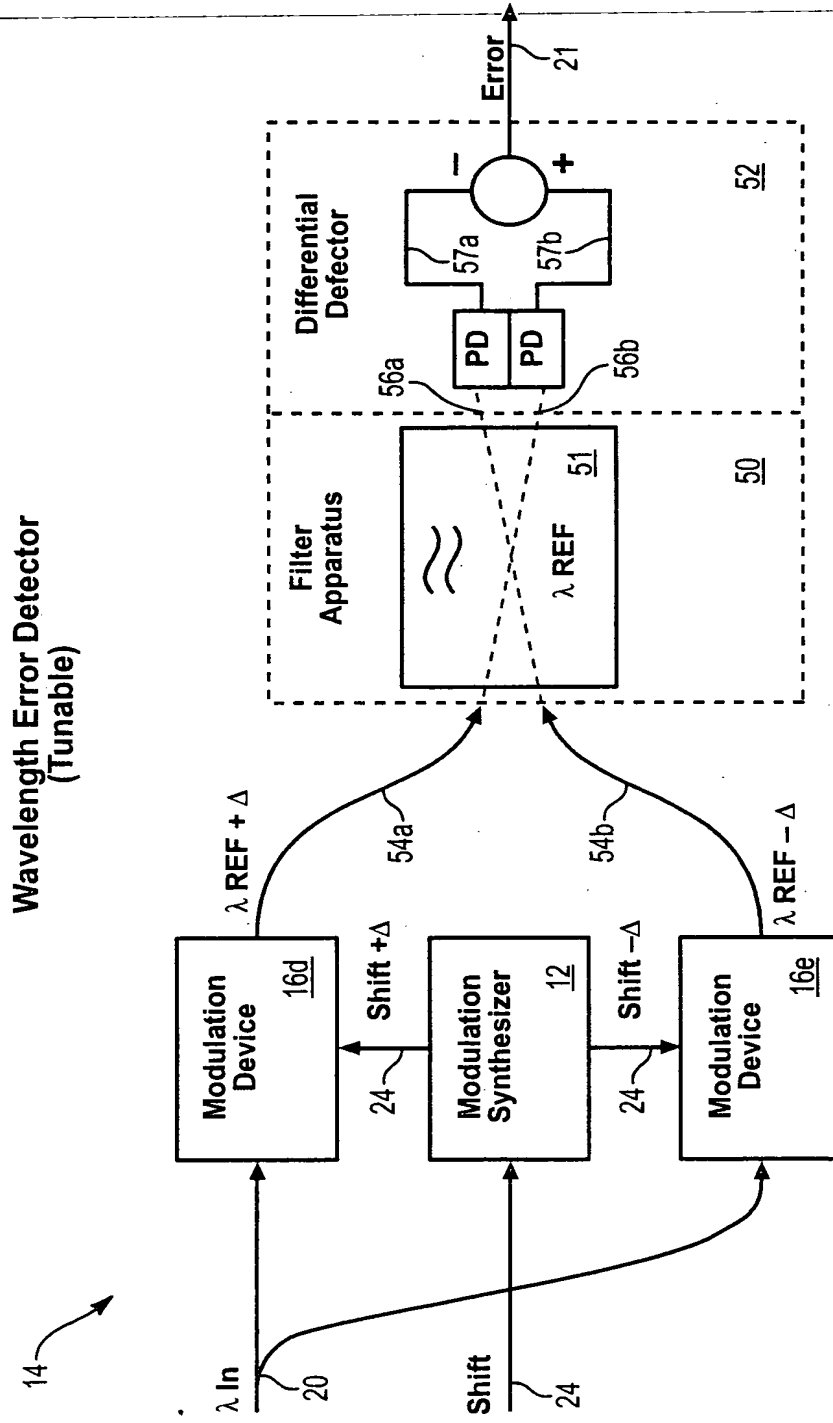


FIG. 9

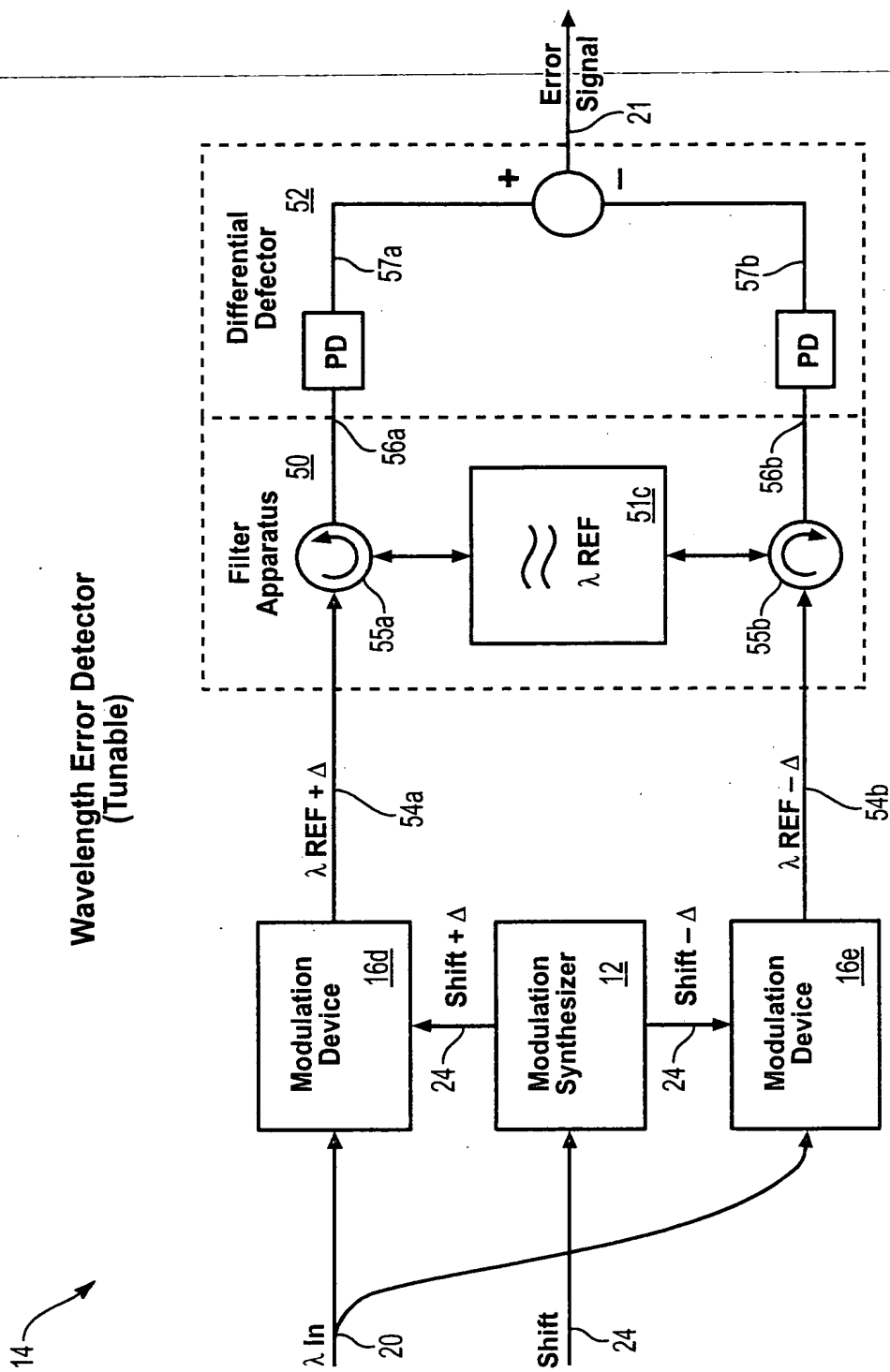


FIG. 10

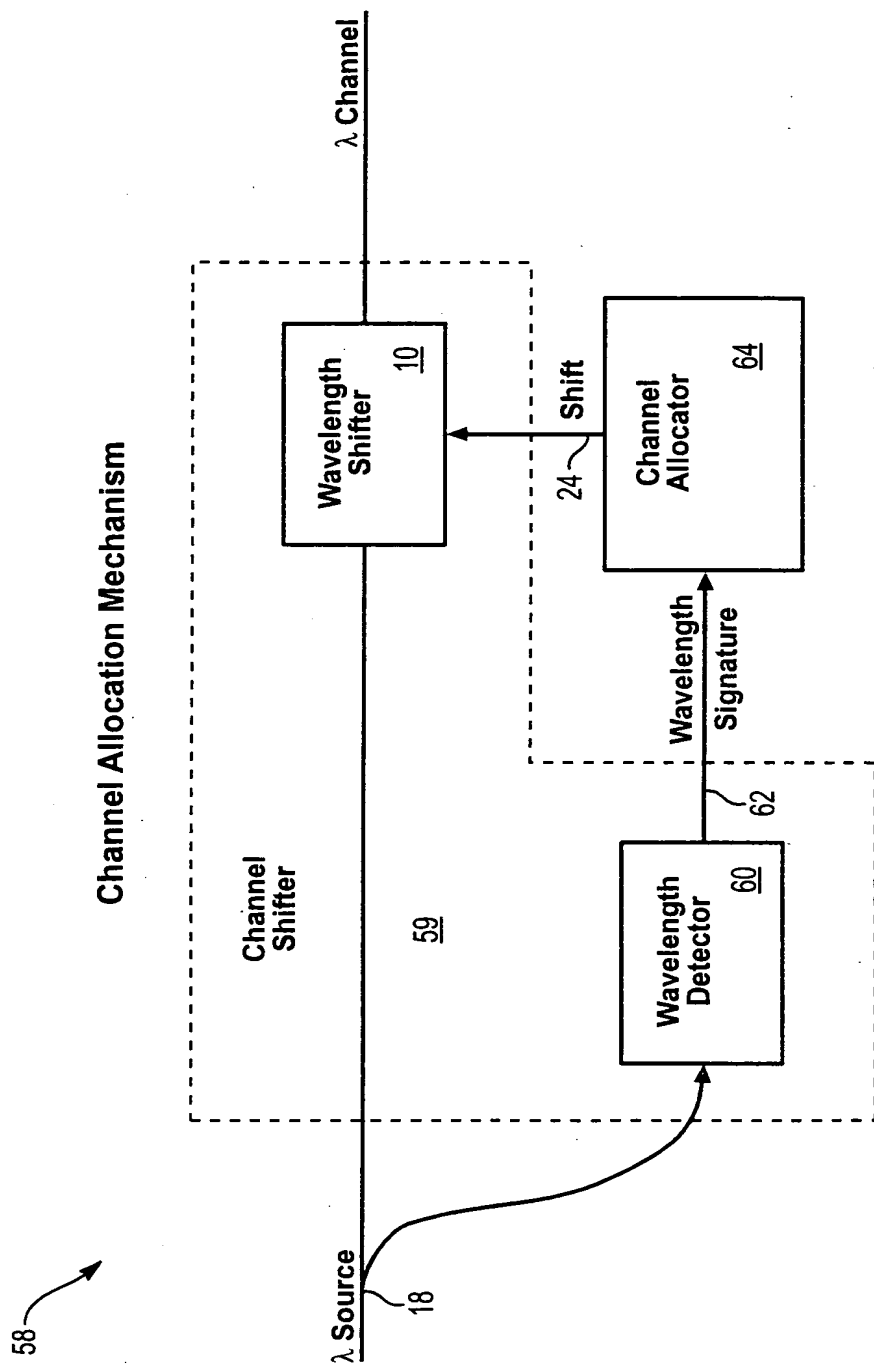


FIG. 11

70

Tunable Wavelength Stabilized Transmitter

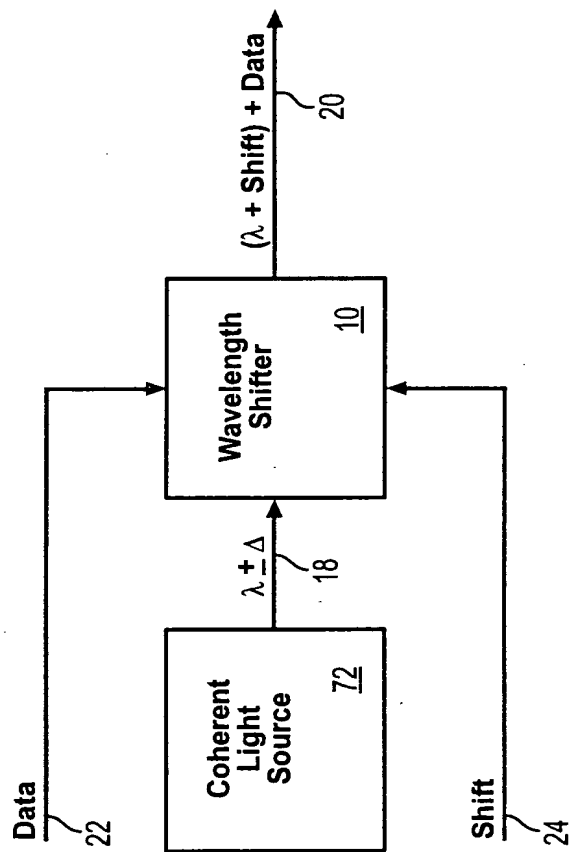


FIG. 12

74

Recursive Wavelength Shifter

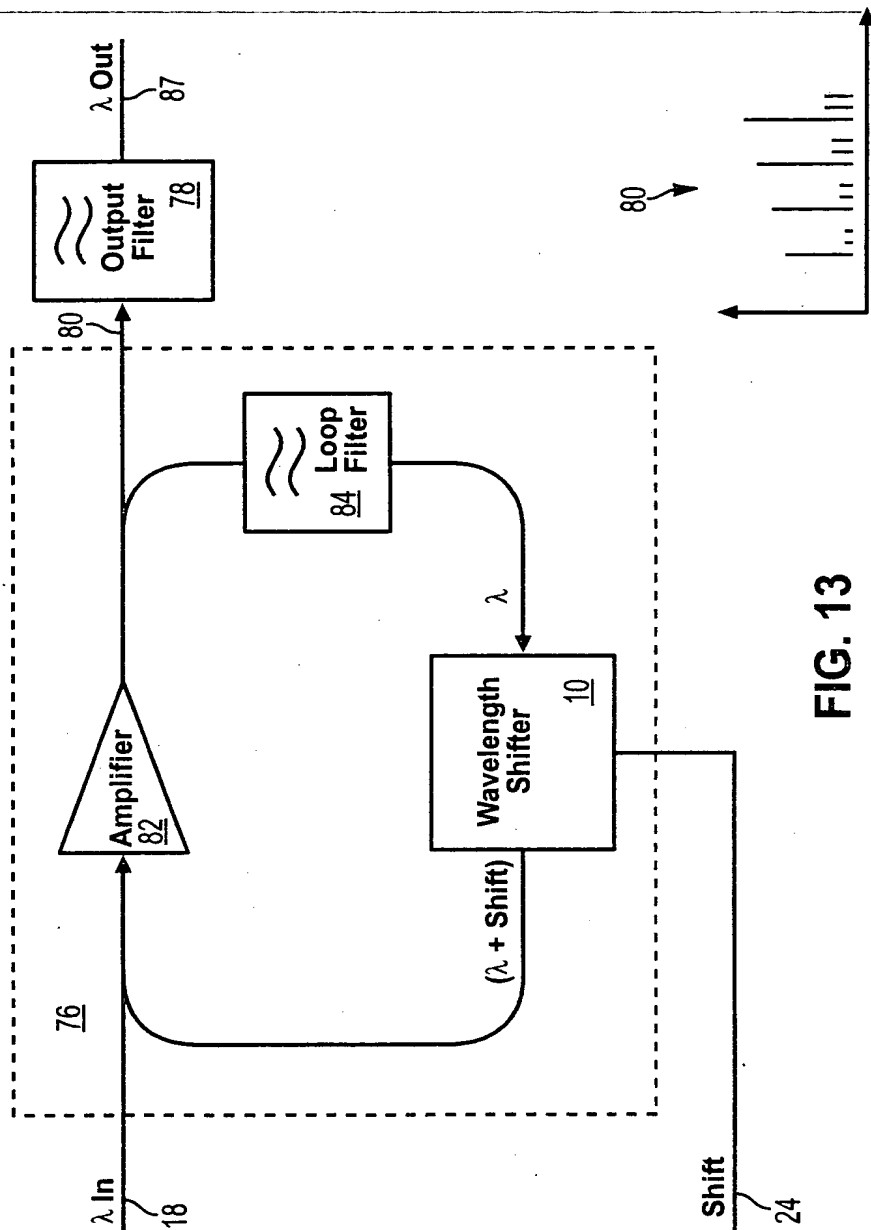


FIG. 13

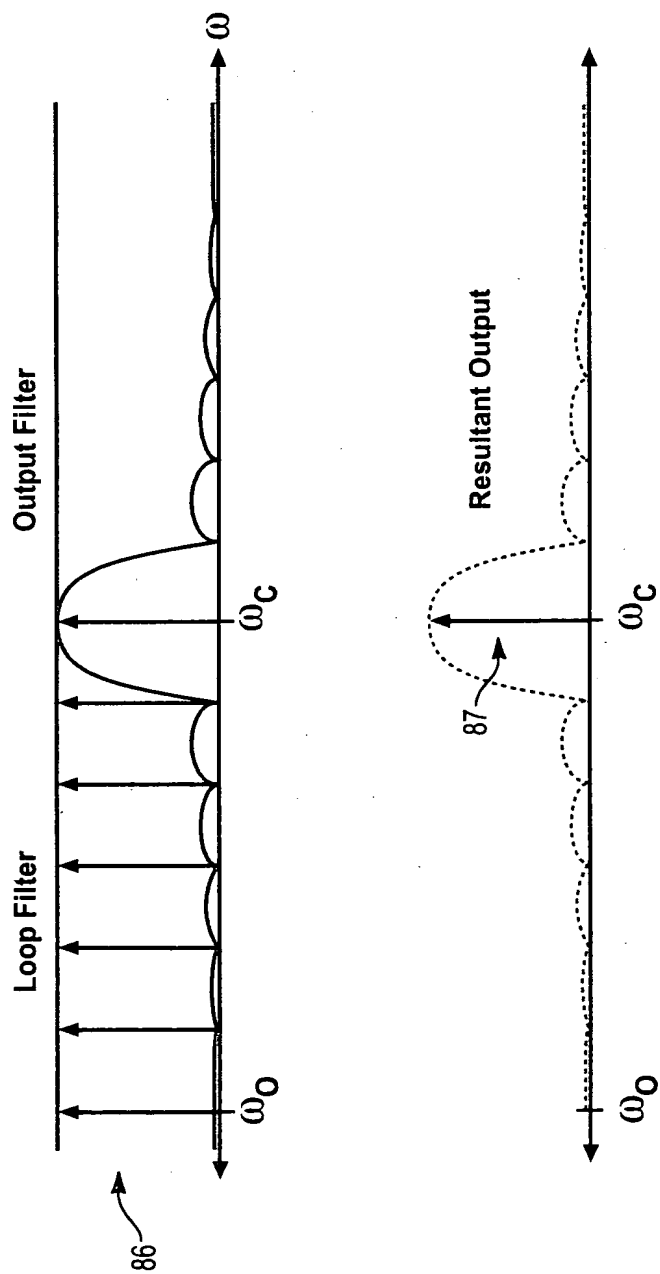


FIG. 14

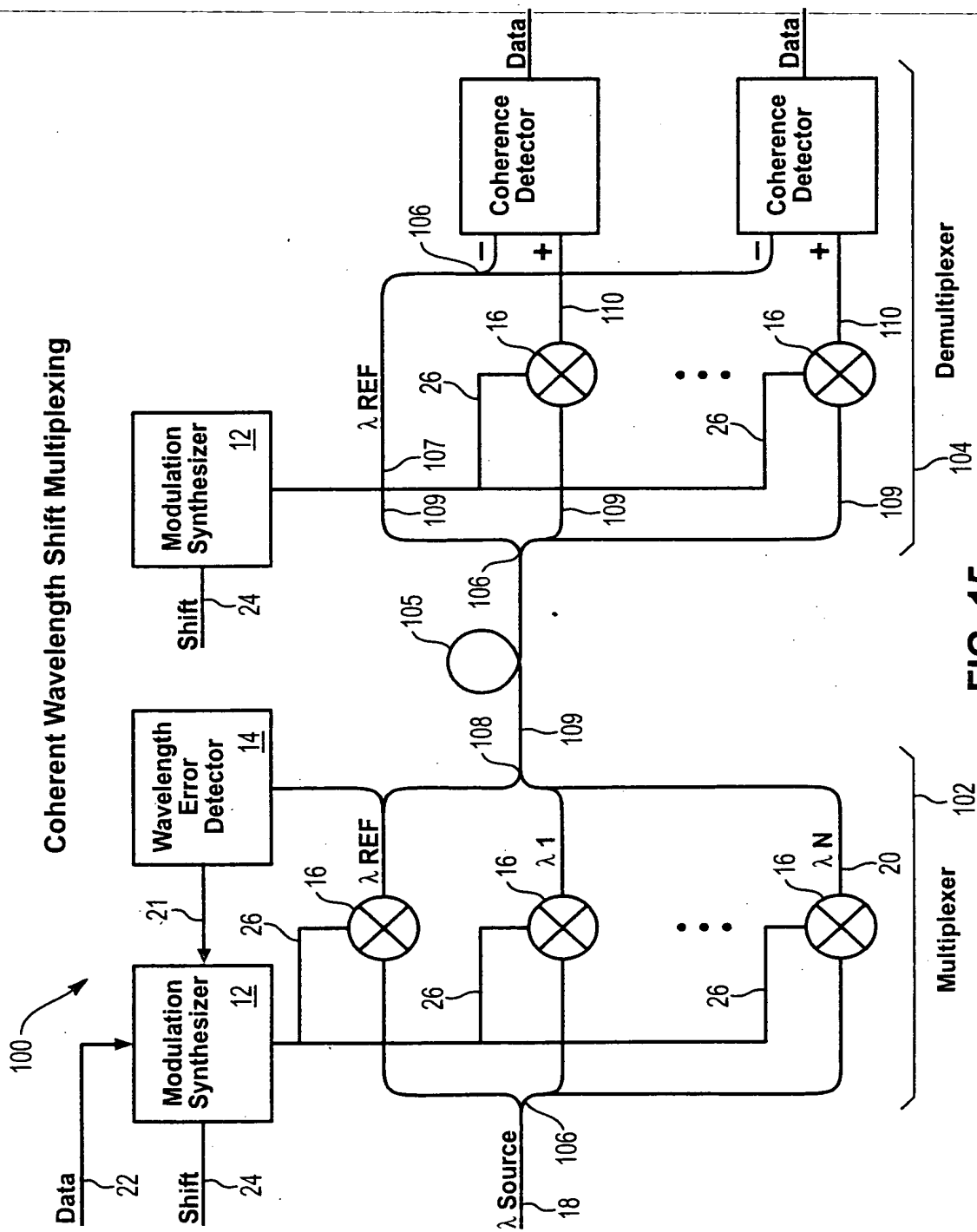


FIG. 15

Full-Duplex Photonic Signals

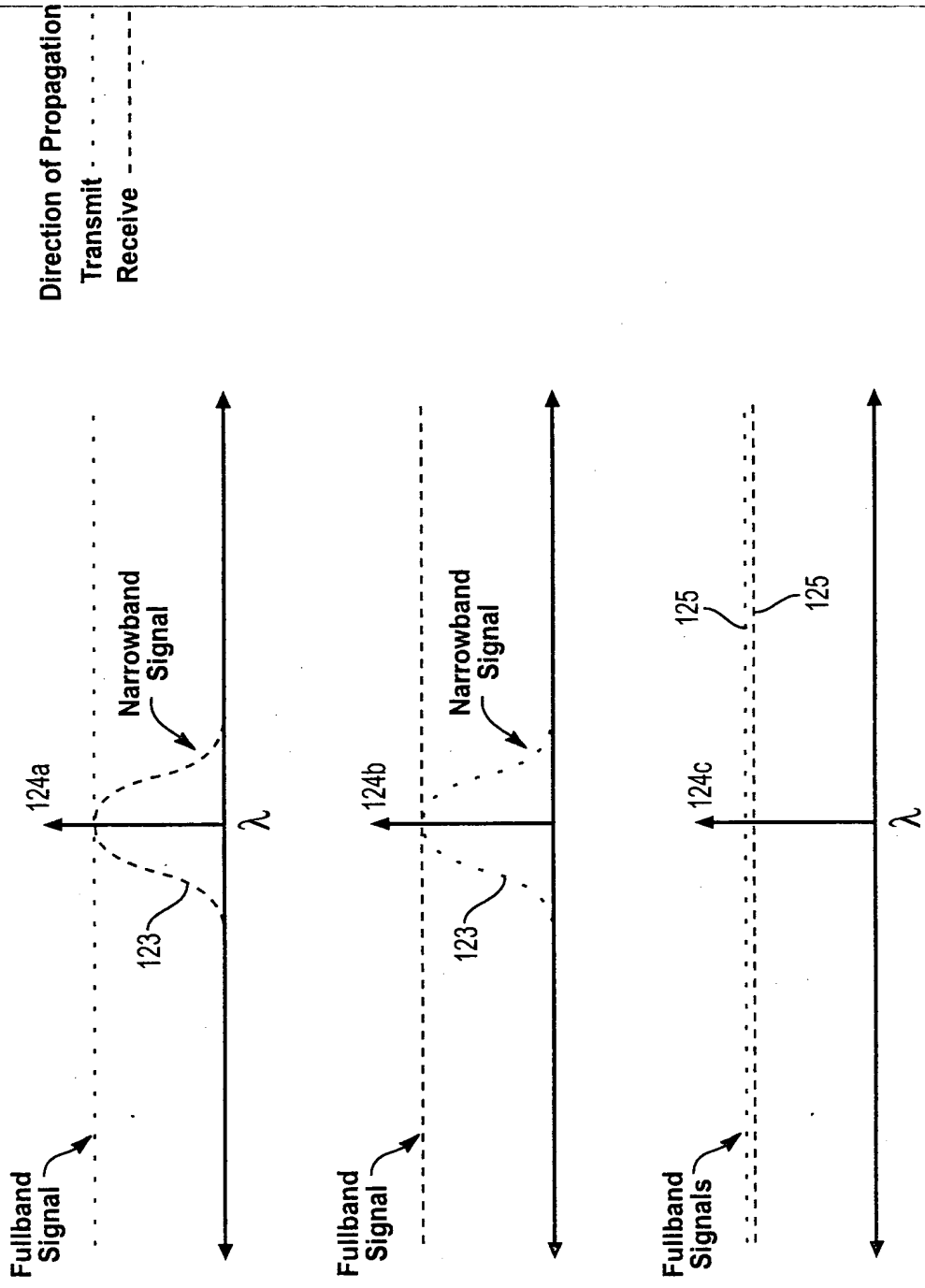


FIG. 16

Wavelength-Shifting Transceivers

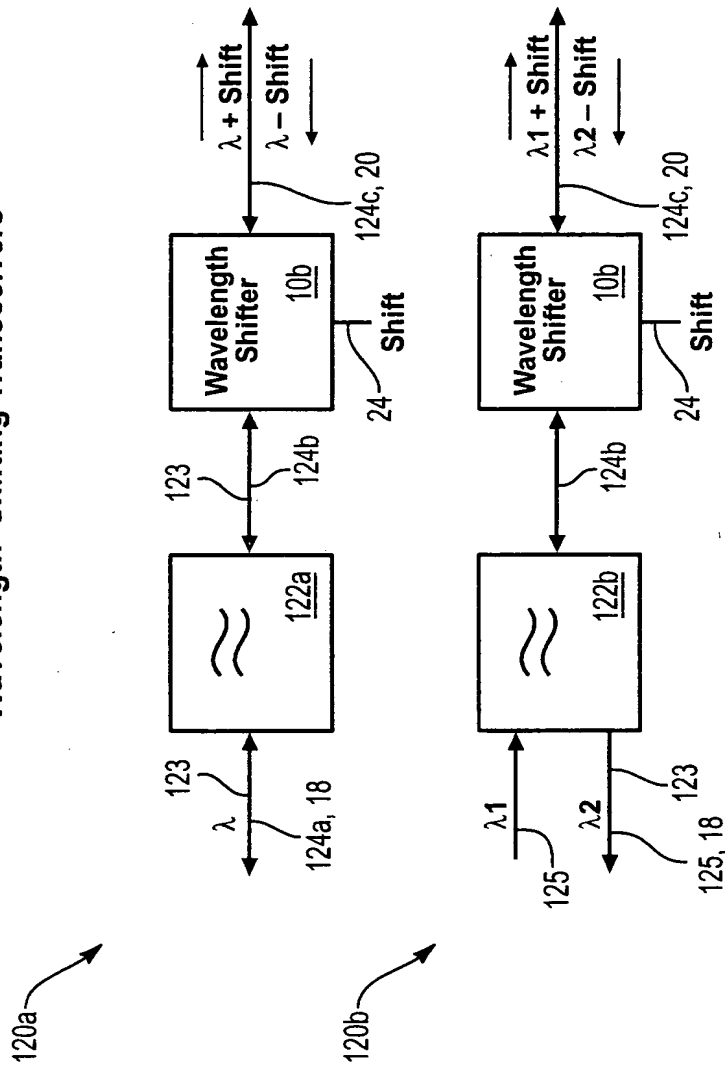
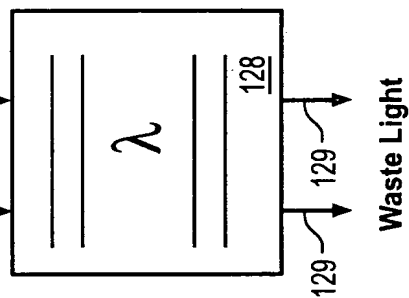
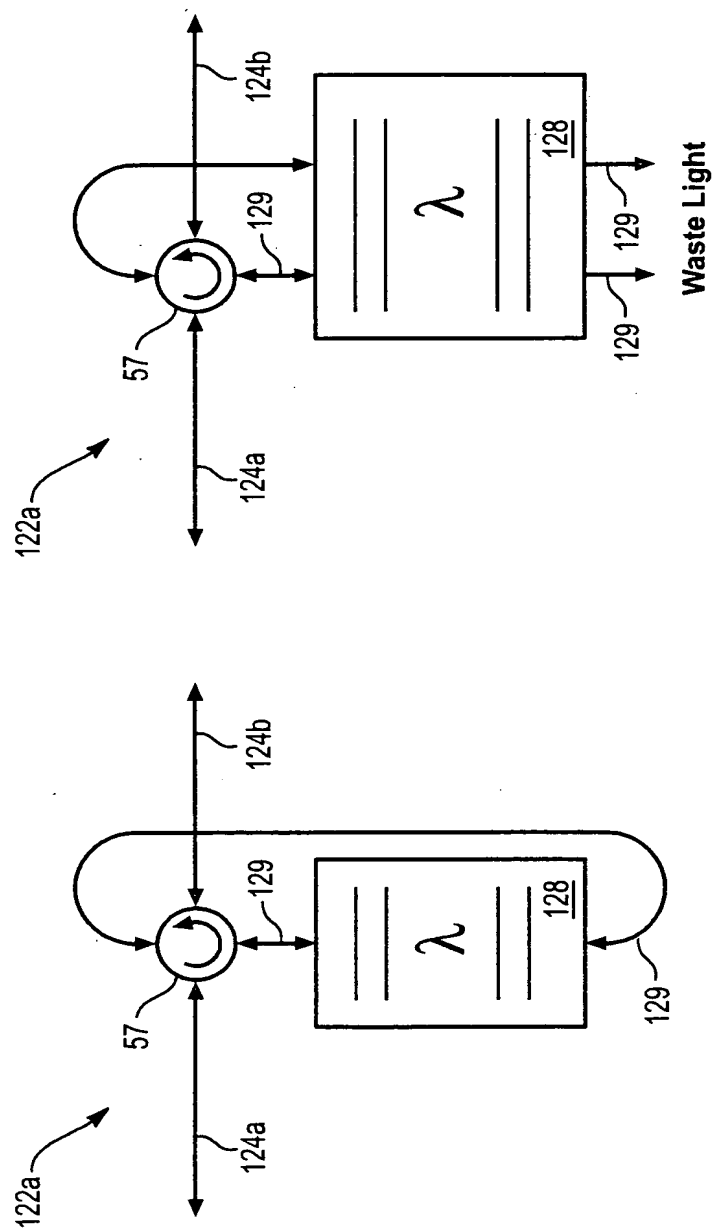


FIG. 17

Full-Duplex Narrowband Filters



Pseudo Full-Duplex Narrowband Filter

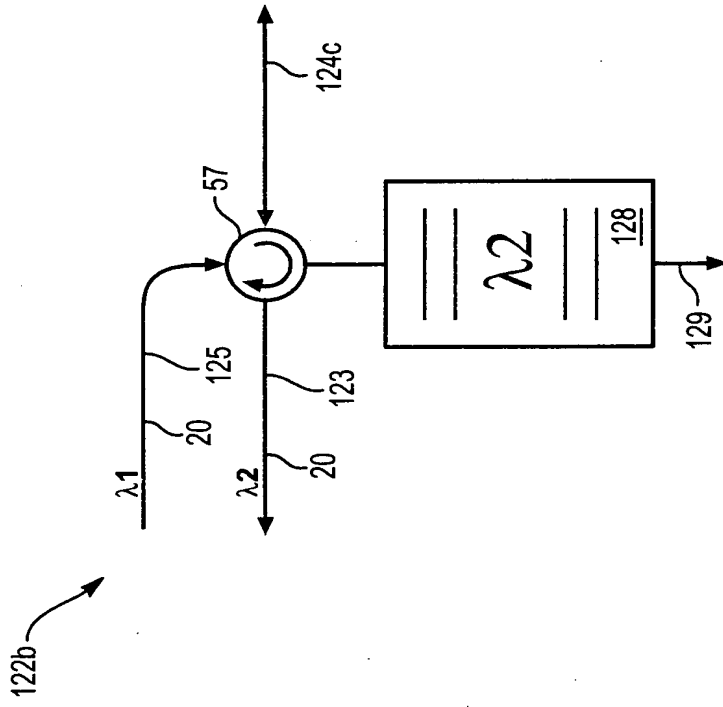


FIG. 19

130

Full-Duplex Crossbar Switch

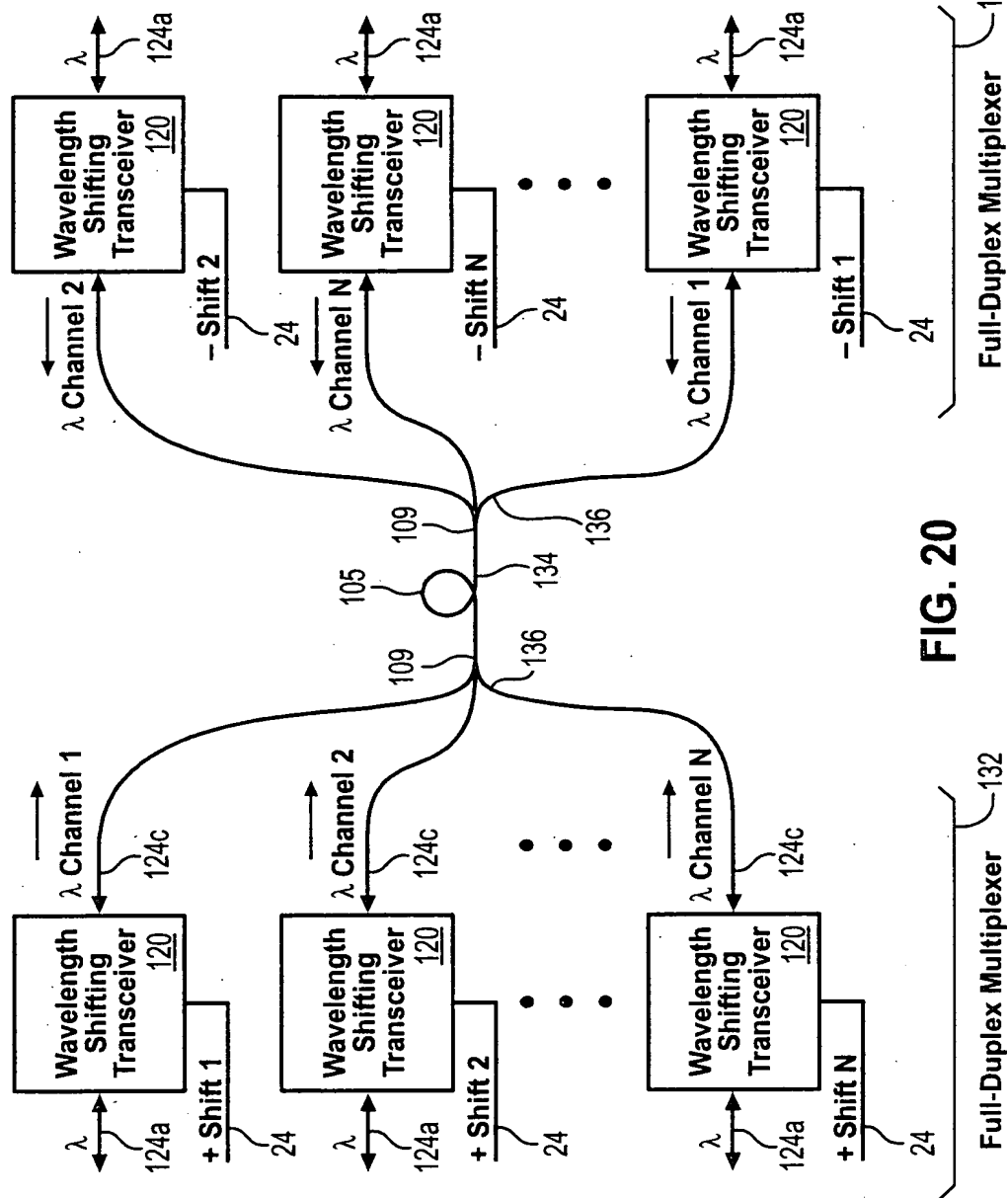


FIG. 20

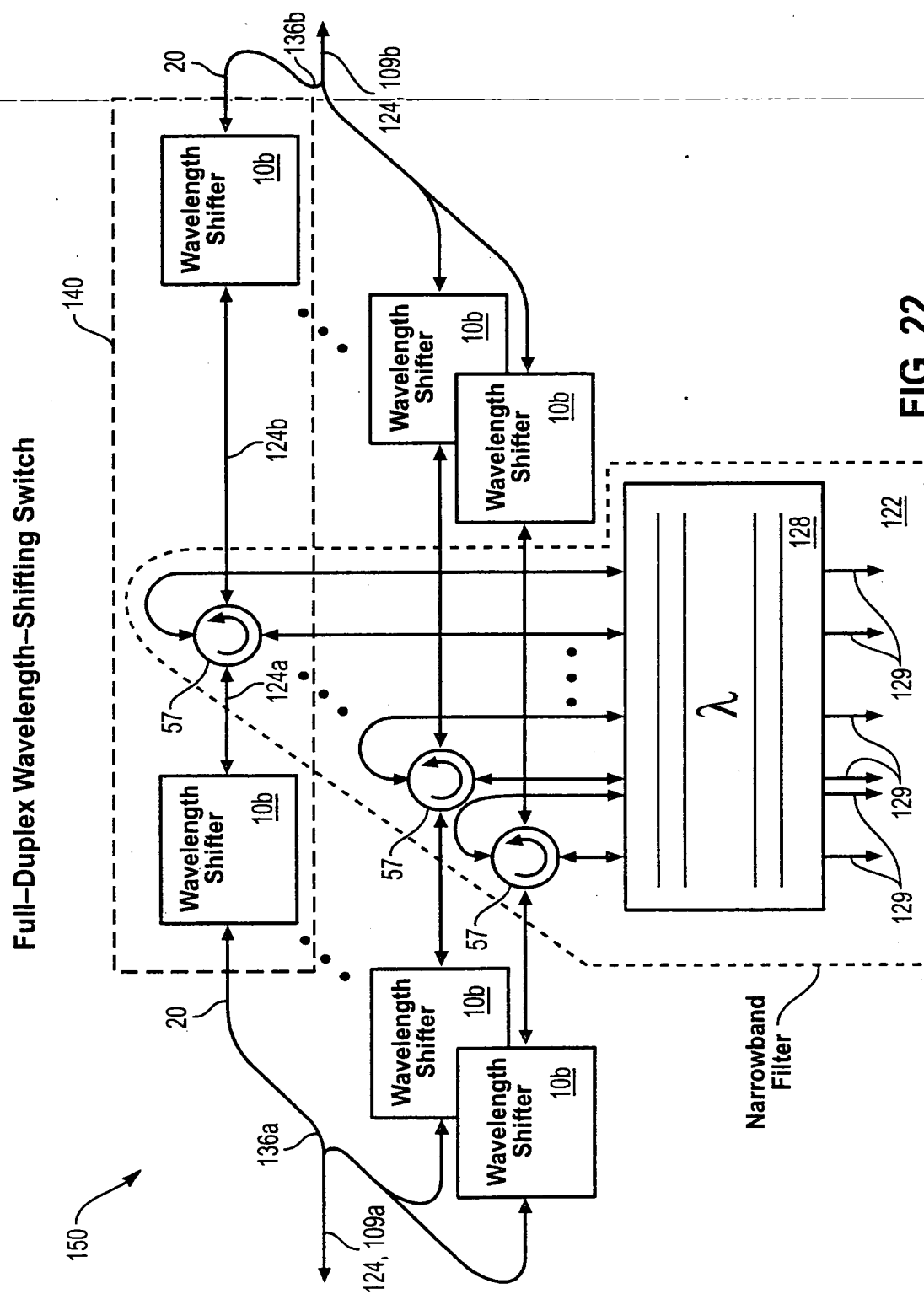


FIG. 22

160 →

Replicated-Spectrum Transceiver

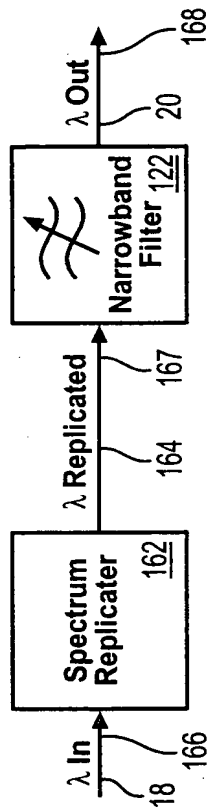


FIG. 23

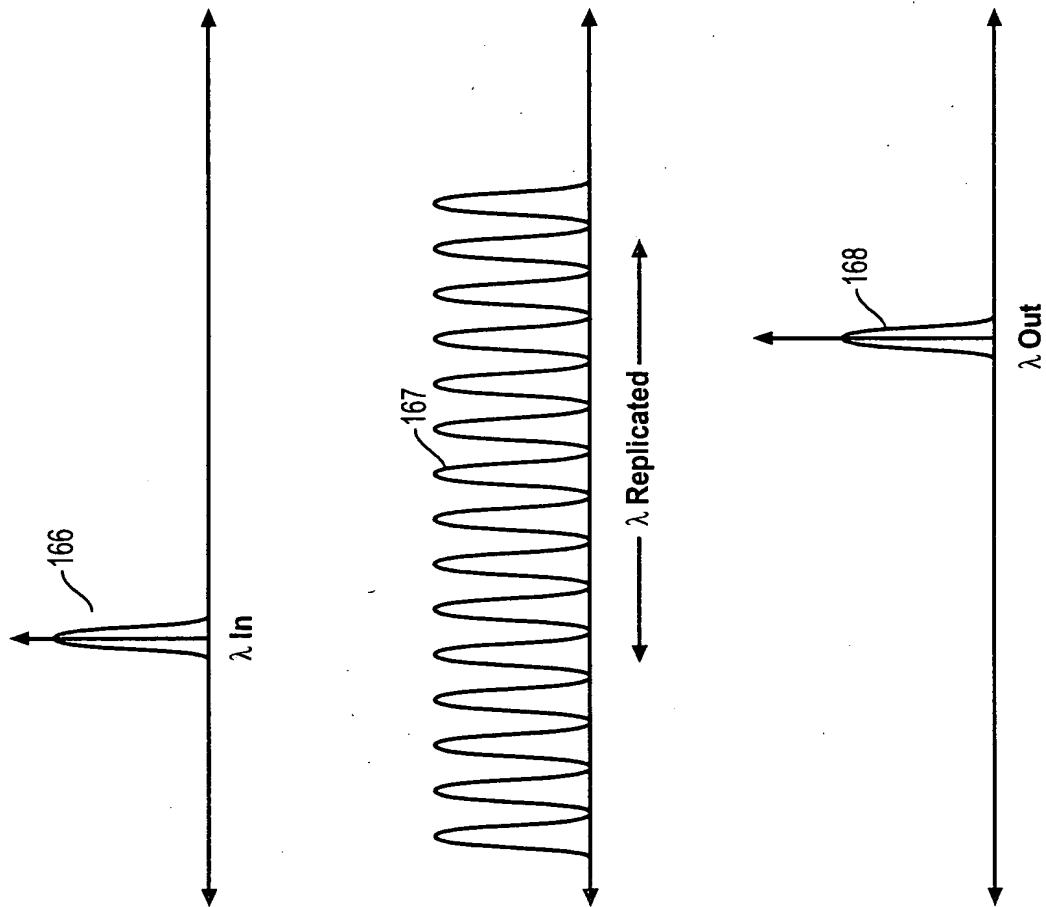


FIG. 24

170

Wavelength-Shifting Replicator

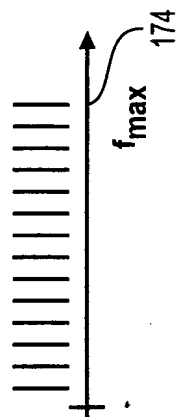
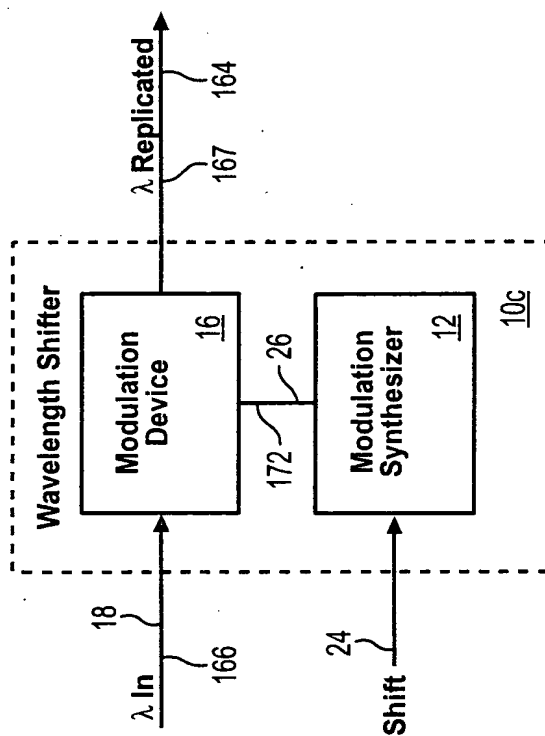


FIG. 25

Recursive Wavelength-Shifting Replicator

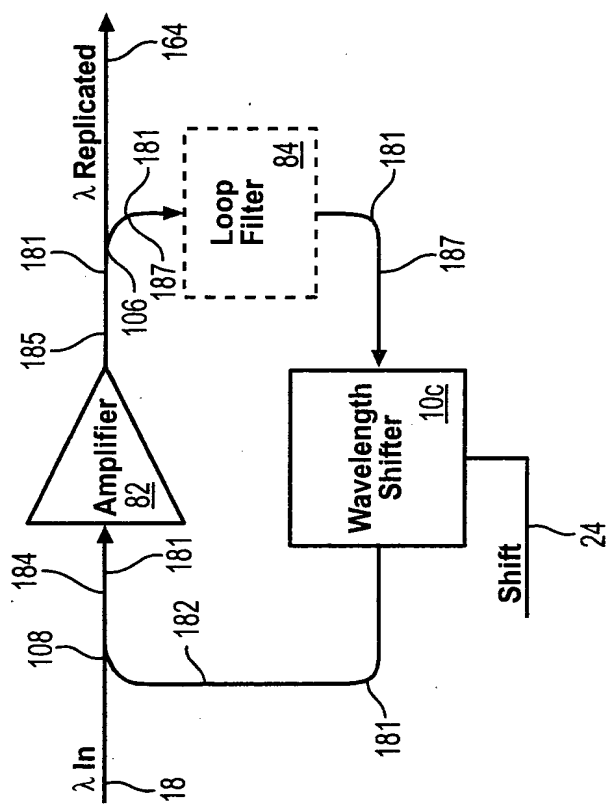


FIG. 26

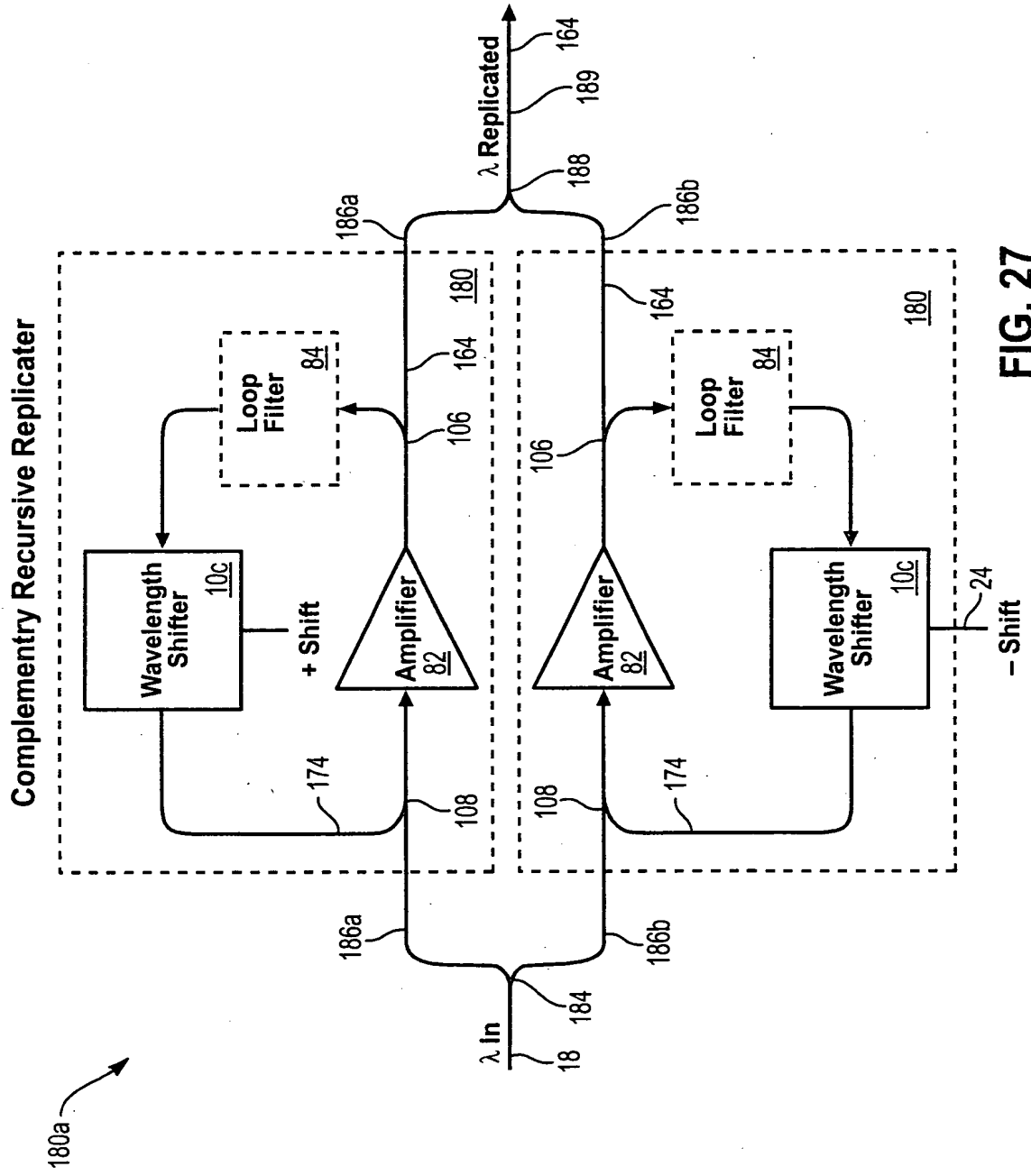


FIG. 27

190

Four-Wave-Mixing Replicator

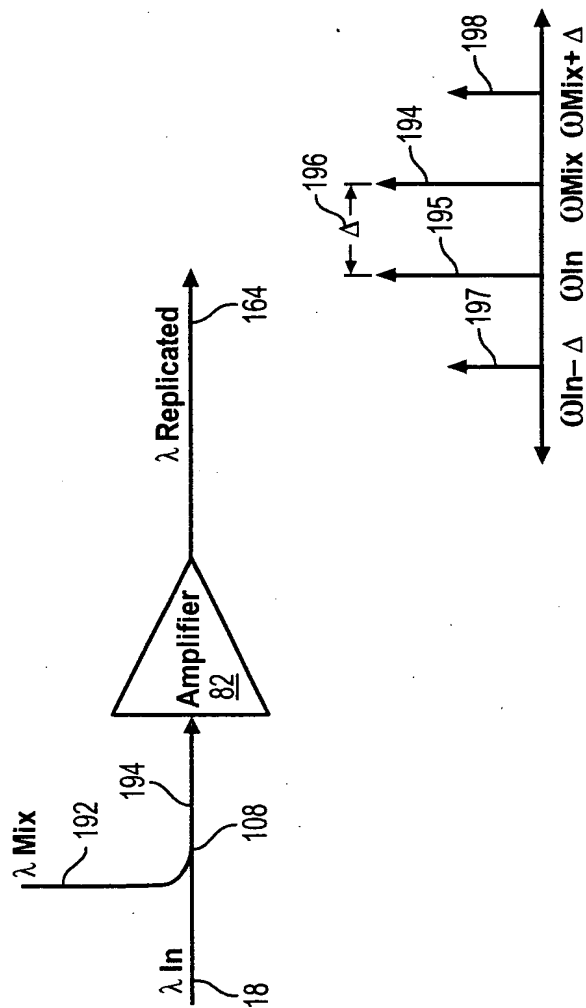


FIG. 28

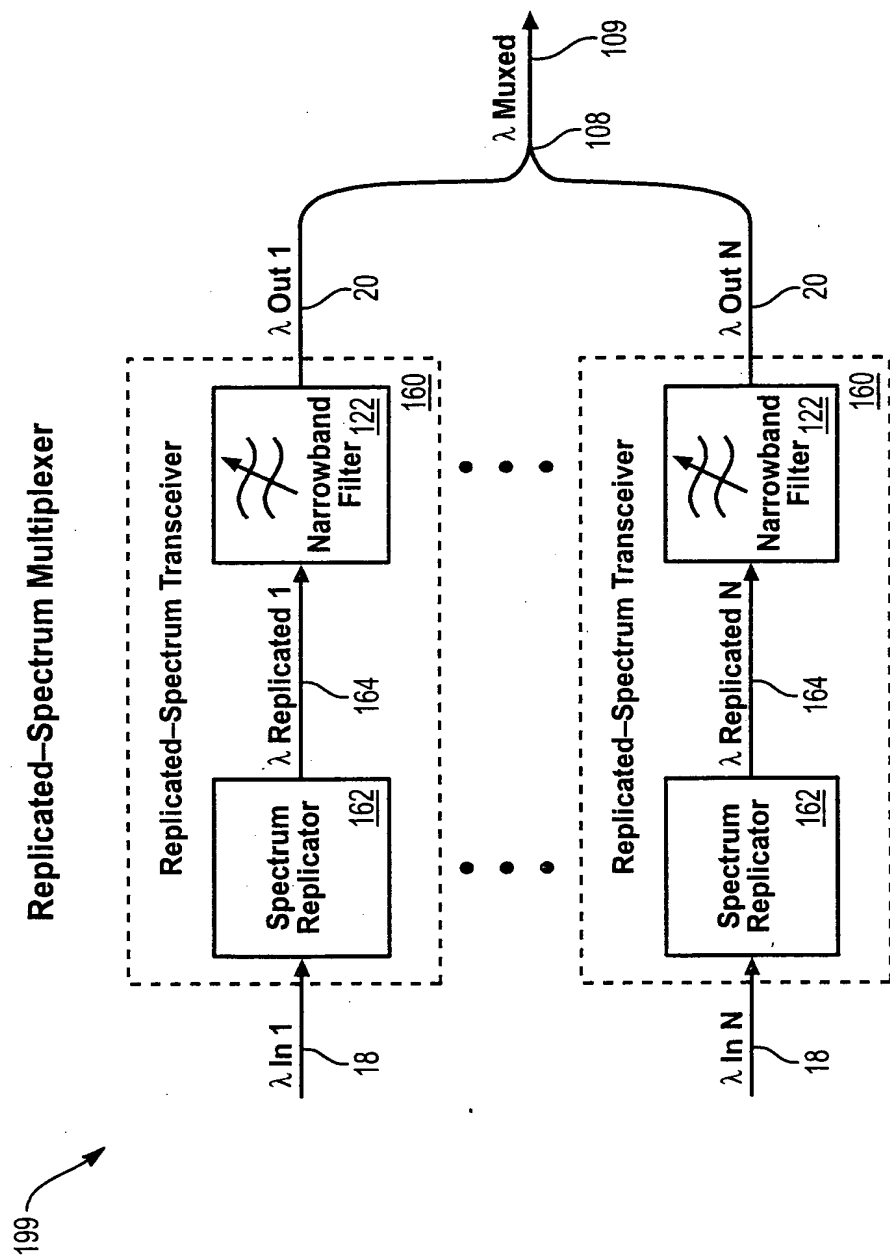


FIG. 29

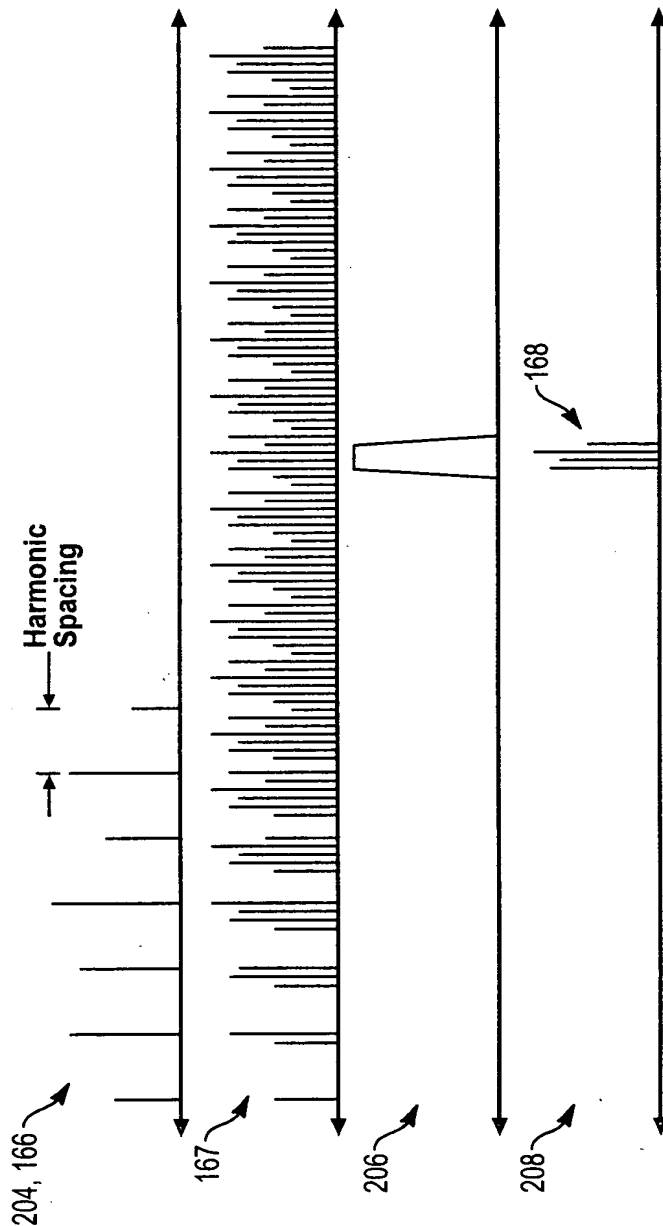
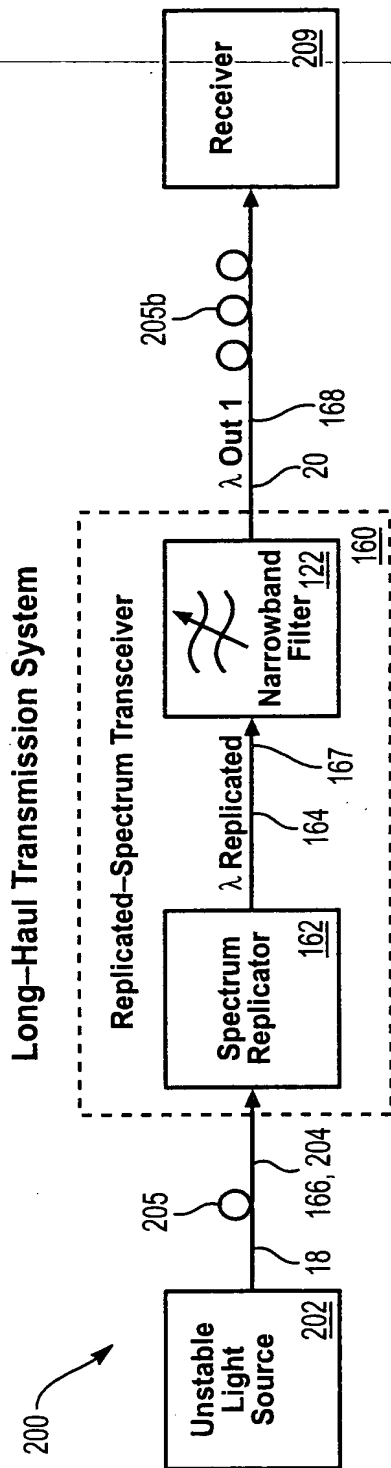


FIG. 30

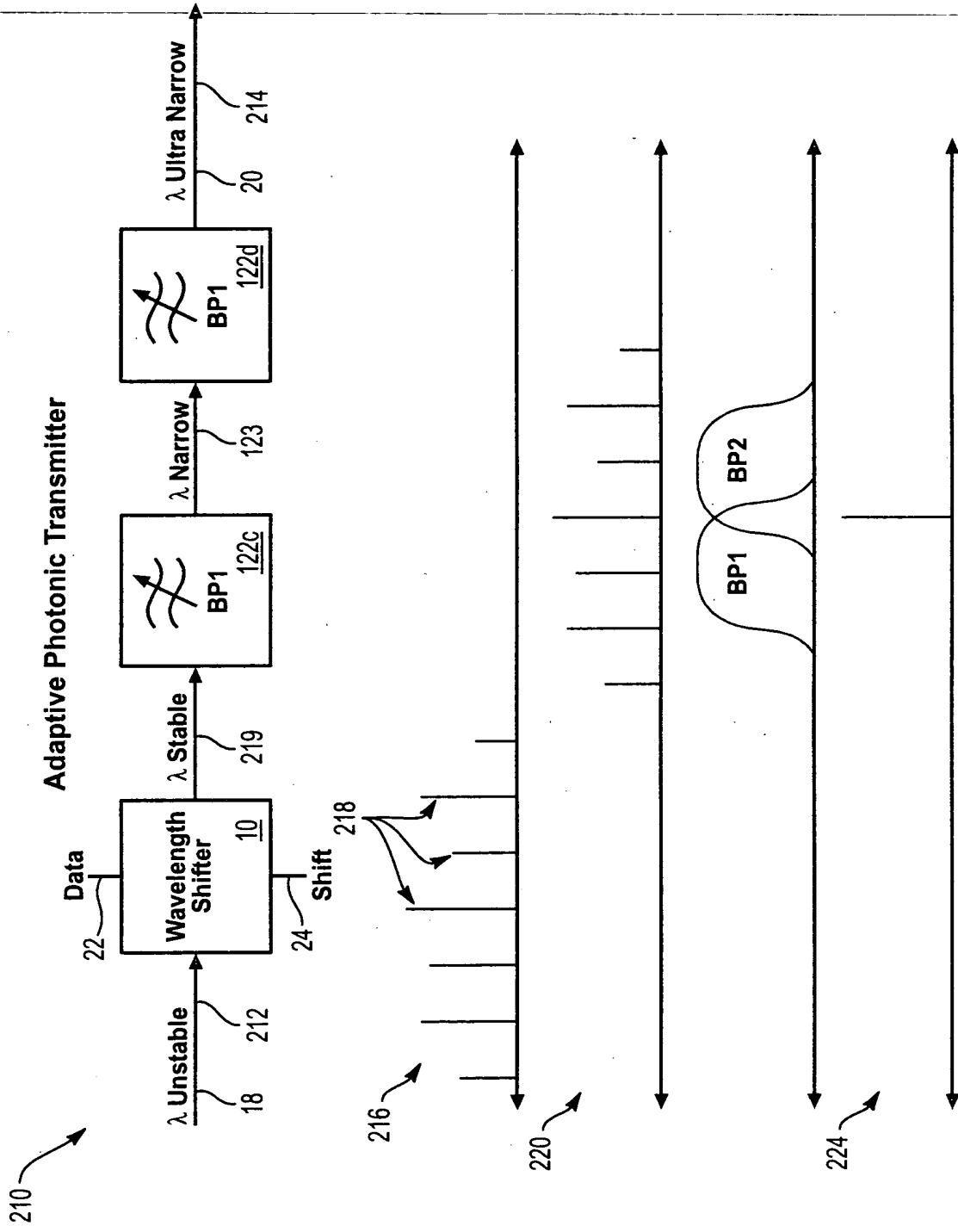


FIG. 31

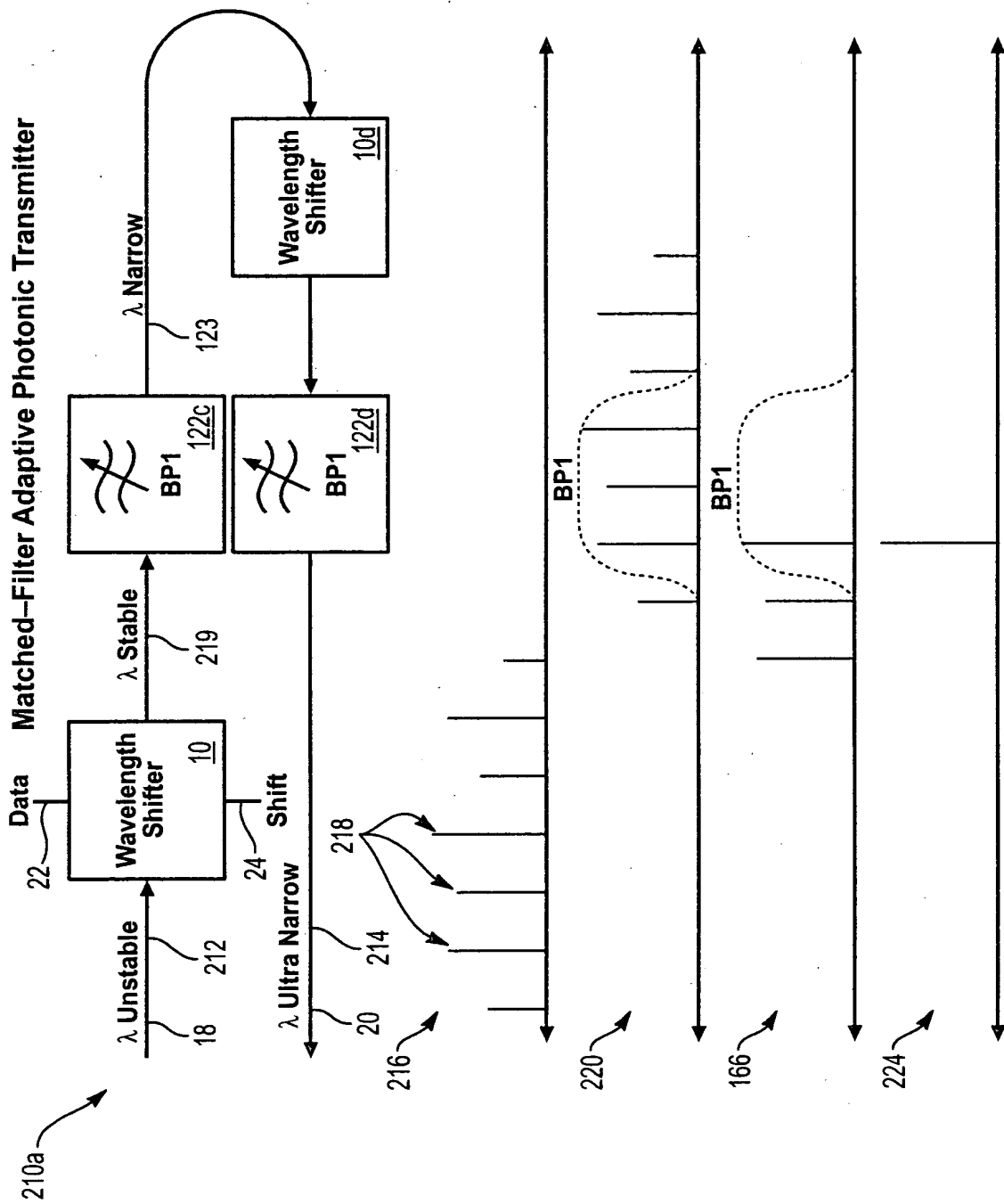


FIG. 32